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ABSTRACT

The paper is a product of the 3-year project, "Functional Mainstreaming for Success," designed to develop a model for instructional mainstreaming of handicapped children (3-6 years old) in community settings. Thirty-two sources were reviewed which deal with the teacher competencies needed by regular teachers for successful mainstreaming. Sources include pragmatic summaries of personal experiences, comparison of teachers' and professors' views on teacher competencies, a dissertation based on teachers' reports of successful and unsuccessful mainstreaming experiences, competencies judged essential for teacher certification, and a review of Deans' Grant Projects. Twenty major competency areas were identified by at least one-fourth of the sources as essential. Three additional competency areas mandated by the long term needs of handicapped students are also identified. The 23 competencies are outlined and include: prepare class for mainstreaming, assess needs and set goals, evaluate learning, understand curriculum, conduct effective parent-teacher relationships, teach fundamental skills, understand exceptional conditions, conduct professional consultations, understand the nature of mainstreaming, foster student-student relationships, be aware of attitudes, be knowledgeable about resource and support systems, manage the learning environment, demonstrate competent interpersonal communication, teach communication skills, supervise aides and volunteers, individualize teaching, manage the class, use appropriate teaching techniques, understand legal issues, carry out behavior modification appropriately, be able to analyze tasks, and teach social skills. (DB)

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A Review and Synthesis of Teacher Competencies Necessary for Effective Mainstreaming

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Abstract

Thirty-two sources are reviewed which deal with the teacher competencies needed by regular teachers for successful mainstreaming. These sources include pragmatic summaries of personal experiences, comparison of teachers' and professors' views on teacher competencies, a dissertation based on teachers' reports of successful and unsuccessful mainstreaming experiences, competencies judged essential for teacher certification, and a review of Deans' Grant Projects. From these diverse sources, twenty major competency areas are identified by at least one-fourth of the sources as being necessary for regular teachers. Three additional teacher competency areas are identified which are mandated by the long-term needs of students who are handicapped. The twenty three competencies discussed are not only necessary for mainstreaming but are, by and large, essential for effective teaching of all students.

The parents of a child who is handicapped generally accept the reality that their child may never be able to do all the things other children can do. Yet they still want their child to have the opportunities other children have to learn about the world, to make friends, to develop talents and abilities, and to live as full a life as possible, despite the limitations of a handicapping condition. Attending school gives children opportunities and experiences that parents are not able to provide by themselves. Parents are certainly aware that working with their child may require extra time, planning, and patience; but they are hopeful that teachers and other professionals will care enough to give that extra effort. Far too often, however, children with handicaps are mainstreamed from special education into regular education classes where the teachers, no matter how much they care, have not been adequately trained to work with a child who is handicapped (Crisci, 1981).

Definition

Mainstreaming is a concept that appears to be used differently by different authors, school districts, and state education agencies. The following definition evolved in the attempt to develop a conceptualization of mainstreaming that was concise, but was also sufficiently comprehensive to highlight all the major issues involved in effective mainstreaming (Striefel, Killoran, Quintero, & Adams, 1985).

"Successful mainstreaming is a continuing process, rather than a discrete event. It includes the instructional and social integration of students who have handicaps into educational and community environments with students who do not have handicaps. Successful mainstreaming must:

1. Be based on the decision of the IEP team that a student can potentially benefit from placement with students who are not handicapped;
2. Provide a continuum of least restrictive placement options which range from brief periods of limited interactions, to full-time participation in a regular classroom;
3. Specify the responsibility of students, parents, regular and special education teachers, administrators, and support personnel;
4. Include pre-placement preparation, post-placement support, and continued training for students with and without handicaps, their parents, teachers, administrators, and support personnel;
5. Maximize appropriate interactions between students with and without handicaps through structured activities (such as peer tutoring or buddy systems) and social skills training, as appropriate to specific situations and abilities.

6. Provide functional, age-appropriate activities that prepare the student with handicaps to function in current and future community environments;
7. And occur without major long-term disruption of ongoing educational activities, or other detriment to any student in the mainstream setting."

The Problem

If teachers are to be effective in their efforts to teach mainstreamed students, they must be well trained. However, a monograph published by the American Association of Colleges for Teacher Education states emphatically that current teacher training is inadequate.

> "It can be stated with confidence that the goals of Public Law 94-142 will be realized only if the quality of teacher preparation and professional service in the schools can be improved. High priority must be given to substantial if not massive upgrading and retooling of the programs that prepare teaches for entry to the profession and facilitate their continuing professional development through a lifetime of service.
>
> Teacher preparation in America has never been optimal; it always has been minimal. The level of professional expertise developed in preparation programs is far below that needed for effectiveness, even in the most favorable teaching situations. It is disastrously inadequate for meeting the challenges of a delivery system in which all children, exceptional or otherwise, share school learning environments with the nonhandicapped school population". (A Common Body of Practice for Teachers: The Challenge of PL 94-142 to Teacher Education, 1980, p.4).

There has been considerable effort expended in the attempt to identify the specific teacher competencies necessary to effectively teach mainstreamed students. While questions have been raised about the merit of competency-based training and certification programs (Maple, 1983), the ongoing attempt to identify specific competencies that promote effective teaching for all students, with or without handicaps, seems essential.

Competencies can be grouped in two broad categories: Knowledge competencies, and performance competencies (Horner, 1977; Wilcox 1977). Knowledge competencies encompass the academic and intellectual components of teaching. In a sense, the knowledge competencies are prerequisite to, and underlie the acquisition of performance competencies. These latter include the skills and behaviors of the teacher. Mastery of knowledge competencies could be evidenced in written form. Performance competencies must actually be demonstrated in the classroom. Both types of competencies are needed for effective teaching. Indeed, one might suggest that any competency has both knowledge and performance aspects.

While literally thousands of teacher competencies have been discussed in the education literature, almost none has been adequately validated (Wilcox, 1977). In an ERIC computer search on 12 December 1984 the key word "mainstreaming" listed 3267 entries; "competency based teacher programs" had 2506 entries,

and "validated programs" showed 429 entries. Combining all three descriptors, however, came up with a net yield of zero. In essence, there are as yet no validated programs for training teachers in the competencies necessary for effective teaching of mainstreamed students. However, Wilcox (1977) noted that "training needs are too great to advocate that development be delayed until any single approach has undergone extensive replication and validation: (Wilcox, 1977, p.419). Regardless of teachers' readiness, students with a wide range of handicaps are already in the schools, and the numbers served in regular classrooms continues to increase.

If teachers are to be adequately trained, the competencies that are necessary to become a good teacher must be identified. A number of attempts have been made, and the results are scattered throughout the education literature (see appendix A). As might be expected, different authors identify different competencies. This paper represents an attempt to synthesize the research, ideas, and opinions that exist in the education literature on what competencies are necessary for teachers to effectively teach students who are severely handicapped.

Procedures for Identifying Competencies

Numerous approaches have been attempted by authors interested in specifying teacher competencies. These include pragmatic summaries of personal experiences (Schulz and Turnbull,

1983), soliciting and comparing teachers' and professors' views of essential competencies (Goodspeed & Celotta, 1982), having teachers identify specific successful and unsuccessful mainstreaming experiences (Redden & Blackhurst, 1978) and reviews of Deans' Grant Projects (Rader, 1978). Some authors have identified hundreds of individual competencies (e.g. Goldhammer, Rader, & Reuschlein, 1977, 464 competencies; Haring, 1978, 550 competencies), but all have synthesized those very detailed listings into general "clusters", "areas", or "functions". For practicality reasons, only those general areas identified as important are listed in this review.

Three thorough and comprehensive studies were: (1) a doctoral dissertation by Redden (1976) based on specific teacher examples of effective and ineffective mainstreaming (Redden & Blackhurst, 1978); (2) a synthesis of competency lists submitted from nationwide Deans' Grant Projects that were developing pre-service programs for regular classroom teachers (Rader, 1978); and (3) A Common Body of Practice for Teachers (1980), produced by the national Support Systems Project, University of Minnesota, under the direction of Maynard C. Reynolds. From these three studies a nucleus of competency clusters were formed. Other articles and studies which were reviewed have been categorized within these clusters.

The competency areas are listed using the wording of the original sources. Some competencies were published without descriptors, and in those cases where the wording was not the same as in the "nucleus" papers, a judgement was made about the meaning of the competency described, and it was assigned where it seemed to best fit (e.g., Haring, 1978, lists one competency area as, "engineering physical properties of a classroom". This was judged by as compatible in its intent with Rader's, 1978, competency area of "Learning Environment" and was consequently listed there). Several sources listed competency areas that either were not listed by others, or were so lacking in descriptors that they could not be placed in a similar category - all such competencies were listed separately. Sources listed as concurring that a specific competency is necessary either explicitly specified that competency, or were adjudged to be identifying the same or a very similar competency area.

In reviewing this initial summary several areas overlapped substantially and were subsumed within another topic. (e.g., the area "Understanding Students" was mentioned by only one author. It was adjudged to be subsumed in the other topical areas of "Nature of the Handicaps", "Attitudes", "Learning Styles", "Communication", "Teacher-Parent-Student Relationships", and "Student-Student Relationships").

This initial process resulted in a somewhat lengthy list of competency areas. Some of these were identified as important by many sources; some were advocated only in a single source (see Appendix A for a complete listing of the sources reviewed). It is interesting to note that not a single competency area was deemed essential by unanimous agreement of all 32 sources.

To further synthesize the list of competencies, those areas not supported by at least one-fourth of the sources reviewed were deleted. The one-fourth cutoff point was chosen arbitrarily and could have been higher or lower. Deleting the competencies via the cutoff score resulted in a list of 20 competency areas that had some degree of consensus as to their importance.

However, a conspicuous absence of certain teacher competencies was apparent in reviewing this list. There are three major competency areas that are virtually demanded by the long term needs of students who are severely or even moderately handicapped, especially if their handicapping condition affects cognitive abilities. These teacher competency areas include teaching fundamental skills (this was mentioned by one of the "core" sources, but not supported by one fourth of them); teaching communication skills, and teaching social skills (see Adams, Quintero, Striefel, & Killoran, 1985, for an extended discussion of the rationale for including these critical competencies). Adding these three competency areas to the list

synthesized from the literature resulted in 23 major areas of teacher competency judged essential for the effective teaching of mainstreamed students.

Listing of Teacher Competencies

The final listing of teacher competencies is not as definitive as one might wish. A certain amount of unavoidable overlap exists. Some competencies are reasonably seen as subsets of other competency areas. Several were not generally identified as important by teachers, but are essential in meeting student's long-term needs. There is, by necessity, a degree of subjectivity in the judgments made in this manuscript, although the authors have tried to avoid misrepresenting anyone's view. Given these qualifiers, however, the following list represents a comprehensive synthesis of current research and expert opinion about the teacher competencies necessary for successful mainstreaming.

1. Prepare Class for Mainstreaming
   a. Conduct puppet shows, discussions, and other class preparation activities;
   b. Discuss difficulties specific to the student to be mainstreamed;
   c. Conduct discussions on recognizing and accepting similarities and differences between people.

2. Assess Needs and Set Goals

   a. Understand the tests commonly used in your school;

   b. Know how they are administered;

   c. Interpret the results obtained;

   d. Use the results to set goals for the student.

3. Evaluate Learning

   a. Understand differences between criterion and norm-referenced tests;

   b. Collect data on student progress to use for: measuring progress toward goals, feedback for the student, feedback for the parents;

   c. Use data as a basis to change goals, as needed.

4. Curriculum

   a. Have general knowledge of curricula used in your school;

   b. Keep current on new curricula and materials appropriate for grade level(s) you teach;

   c. Adapt existing curricula to meet the IEP goals of individual students.

5. Parent-Teacher Relationships

   a. Understand the parent involvement mandated by Public Law 94-142;

   b. Establish and maintain regular, positive communications with parents;

c. Involve parents in the classroom or program when appropriate;

d. Know referral procedures for other services family may need (e.g., therapy, welfare).

6. Teaching Fundamental Skills

a. Know methods for training academic basics;

b. Know methods for teaching non-academic survival skills (e.g., health, safety, leisure time, problem-solving) appropriate to your grade level;

c. Understand the specific skills needed by a particular mainstreamed student, and how to teach those skills.

7. Exceptional Conditions

a. Develop basic understanding of handicapping conditions;

b. Understand the adaptations needed to work with students who are handicapped;

c. Acquire a thorough understanding of the handicapping conditions of any student in your class.

8. Professional Consultation

a. Know how to access specialists for consultation about students with handicaps;

b. Collect information to document concerns in special areas;

c. Accept and use constructive feedback from consultants.

9. Nature of Mainstreaming

   a. Understand the district/school definition and rationale for mainstreaming;

   b. Understand the educational guidelines mandated by Public Law 94-142.

10. Student-Student Relationships

   a. Develop skill in structuring and teaching positive student-student interactions;

   b. Use peer buddies and peer tutors;

   c. Demonstrate equity when dealing with all students;

   d. Group students in ways which promote social interactions.

11. Attitudes

   a. Self: Recognize and overcome personal biases and stereotypic, preconceived ideas of students with handicaps and of mainstreaming. Demonstrate knowledge of how personal attitudes can affect teacher behavior and student learning;

   b. Other adults: Provide accurate information to help modify misconceptions held by others (parents, colleagues, etc.);

   c. Students: Promote acceptance of the student with handicaps by: conducting discussions, facilitating interactions, noting difficulties and modelling appropriate behaviors..

12. Resource and Support Systems

    a. Know how to access and use agencies, programs, and individuals in the school or district who can serve as resources.

13. Learning Environment

    a. Arrange a classroom or other setting so that students with handicaps can have both complete and safe access;

    b. Establish a positive climate for learning by modelling acceptance of individual differences, and encouraging each student's best effort.

14. Interpersonal Communication

    a. Demonstrate competence in oral and written communication skills;

    b. Know one's personal style of communication (e.g., personal responses to stress, feedback, compliments);

    c. Know how to adapt information for different audiences (e.g., parents, teachers, general community).

15. Teaching Communication Skills

    a. Have sufficient knowledge of language skills at the age level which you teach to be able to note strengths and deficits in individual student's expressive and receptive communication;

    b. Teach language skills in task-analyzed, generalizable steps;

c. Become familiar with special communication needs of a mainstreamed student (e.g., manual signs).

16. Administration

a. Function as a supervisor of aides and volunteers, as well as students;

b. Manage and coordinate schedules and programs of specialists and consultants;

c. Keep school administrator informed of ongoing activities, problems, successes;

d. Involve administrator by seeking feedback early, as well as by asking for resources when needed.

17. Individualized Teaching

a. Show skill in assessing individual needs and in adapting instruction to the individual;

b. Show skill in collection progress data;

c. Know methods for individualizing instruction within groups.

18. Class Management

a. Organize and control classrooms to facilitate learning;

b. Demonstrate skill in group alerting, guiding transitions, arranging/organizing materials, crisis intervention, positive reinforcement of individuals and groups.

19. Teaching Techniques

a. Understand and use appropriate teaching techniques for group and individual instruction;

b. Show ability and willingness to be flexible and to change procedures to accommodate individual students.

20. Legal Issues

a. Understand the legal implications of P.L. 94-142 for educational services in public schools;

b. Know rights of persons with handicaps;

c. Understand school/district policies for mainstreaming;

d. Understand "due process".

21. Behavior Modification

a. Identify problem behaviors precisely;

b. Identify desirable behaviors;

c. Know how to identify and use effective reinforcers;

d. Monitor changes in behavior.

22. Task Analysis Skills

a. Understand the rationale for task analysis;

b. Demonstrate ability to task analyze a variety of necessary student skills;

c. Consolidate discrete tasks into total desired behavior;

d. Demonstrate ability to collect progress data.

23. Teaching Social Skills

a. Know the social skills expected of students at the grade level you teach;

b. Know how to identify strengths and deficits in social skills for students that you teach;

c. Know how to systematically train social skills using curricula and/or incidental opportunities.

Discussion of Competencies

It was previously noted that the 23 competencies are general statements representing fairly broad competency areas. Some are of much greater specificity (e.g., task analysis), while others are almost sweeping in scope (e.g., curriculum, class management). The final list of competency statements contains substantial overlap, redundancy, and varying specificity for several reasons. First is simply the effort to be true to the working and apparent intent of the original sources. Second, reducing the original list to the final one necessitated numerous judgments. There was some concern that much more change would result in excessive editorializing resulting in certain essential issues being obscured. (For instance, the study by Fredericks, et al., 1977, is one of the best validated ones the authors encountered. The results of that investigation suggest that two primary factors accounted for student gains in the sample studied: percentage of programs task-analyzed, and the number of minutes of instruction per day. The latter point was deemed subsumed by "class management", but was important enough that it

was highlighted so it would remain visible). third, it was judged that a certain degree of overlap was acceptable in order to give full weight to the importance of certain competency areas. (For instance, "Legal Issues" is actually mentioned as a sub-component of the "nature of mainstreaming". It could have been subsumed in the latter area, but this would have failed to convey the emphasis given this particular issue by the sources reviewed, one of whom listed it as an often neglected competency that is critical for teachers; Haisley & Gilberts, 1978).

It should be noted, however, that none of the competency areas are precise enough that they could be used, as is, for training purposes. These general statements of necessary competencies must be operationalized into specific goals, objectives, and skills. Volumes have been written about such competencies as classroom management, behavior modification, and teaching techniques. Trainers who use the teacher competencies identified in this paper as guidelines for training will still find it necessary to refine them. Trainers will find needs assessments essential in identifying the strengths of those teachers they are training, and in specifying the knowledge and skills that need to be trained and upgraded.

One might ask which of these competency areas is on the list solely because of the initiation of mainstreaming? That is, if PL 94-142 had not been passed, and if large scale efforts to

mainstream students with handicaps were not being made, which of the competencies could be deleted from the list? It turns out that only four competency areas seem primarily related to mainstreaming: prepare class for mainstreaming, exceptional conditions, the nature of mainstreaming, and legal issues. Of these, the latter three are largely knowledge or information competencies that are relatively easy to acquire. The nineteen remaining competencies are related to teaching all students. This reaffirms Blackhurst's (1982) observation that the teacher competencies required for mainstreaming are equally applicable to teaching students who are not handicapped.

Conclusion

There is both consensus and overlap in the literature as to what major areas of teacher competency are needed to conduct mainstreaming. As was previously noted, there presently are no mainstreaming teacher competencies that have had adequate empirical validation. However, it seems appropriate to reiterate Wilson's observation that, "training needs are too great to advocate that development be delayed until any single approach has undergone extensive replication and validation" (Wilcox, 1977, p 419). The synthesis of competency areas enumerated above represents the opinions, experience, expertise, and research of a broad cross-range of people, including regular teachers with mainstreaming experience, school principals, special education

teachers, university teacher-education faculty, district and state directors of special education programs, recent teacher-training graduates, and experienced social scientists. Many thousands of individuals are represented by the research studies. While none of this demonstrates validation (except for face validity, which seems at least adequate) it does provide a beginning point for researchers, for teachers, and for trainers.

In concluding this section on teacher competencies, some observations by Blackhurst (1982) seem apropos. After reviewing several studies on mainstreaming competencies, he concludes that the teacher competencies needed for effective mainstreaming are virtually the same, with just a few exceptions, as those needed for effective teaching. "The great majority of the competencies identified are competencies that good teachers should possess, regardless of whether or not they are teaching mainstreamed students . . . There appear to be few, if any, competencies that relate to specific teaching strategies with handicapped students that are not equally as valid for use with non-handicapped students" (Blackhurst, 1982, pp 142-3).

References

A common body of practice for teachers: The challenge of Public Law 94-142 to teacher education. (1980). Washington, DC: The American Association of Colleges of Teacher Education, Washington DC.

Adams, P. R., Quintero, M., Striefel, S., & Killoran, J. (1985). Long-term needs of students with handicaps: Mainstreaming and critical competencies for teachers. Unpublished manuscript, Utah State University, Developmental Center for Handicapped Persons.

Blackhurst, A. E. (1982). Competencies for teaching mainstreamed students. Theory Into Practice, 21(2), 139-143.

Chalfant, J. C., Pysh, M. V., & Moultrie, R. (1979). Teacher assistance teams: A model for within-building problem solving. Learning Disability Quarterly, 2: 80-96.

Egbert, R. L., & Kluender, M. M. (1979). Teacher education in 1985, with special reference to the exceptional child: Ideal/probable. Teacher Education and Special Education, 2: 17-20.

Fredericks, H. D. B., Anderson, R. B., Baldwin, V. L., Grove, D., Moore, W. G., Moore, M., & Beaird, J. H. (1977). The identification of competencies of teachers of the severely

handicapped (Grant No. OEG-0-74-2775). Bureau of Education for the Handicapped, Department of Education.

Goldhammer, K., Rader, B. T., & Reuschlein, P. (1977). Mainstreaming: Teacher competencies. East Lansing, MI: Michigan State University, College of Education.

Goodspeed, M. T., & Celotta, B. K. (1982). Professors' and teachers' views of competencies necessary for mainstreaming. Psychology in the Schools, 19, 402-407.

Haisley, F. B., & Gilberts, R. D. (1978). Individual competencies needed to implement P.L.94-142. Journal of Teacher Education, 29(6), 30-33.

Haring, N.G., (1978). Conclusion: Classroom two. In N. G. Haring (Ed), Behavior of Exceptional Children (2nd ed.) Columbus, Ohio: Charles E. Merrill.

Horner, R. D. (1977). A competency-based approach to preparing teachers of the severely and profoundly handicapped: Perspective II. In E. Sontag (Ed.), Educational programming for the severely and profoundly handicapped (pp. 430-444). Reston, VA: Division on Mental Retardation, The Council for Exceptional Children.

Maple, C. C. (1983). Is special education certification a guarantee of teaching excellence? Exceptional Children, 49(4), 308-313.

Mercer, C. O., Forgnone, C., & Beattie, J. (1978). In-service and the large university: Perspectives, issues, and

recommendations. Teacher Education and Special Education, 2: 30-34.

Powers, D. A. (1983). Mainstreaming and the inservice education of teachers. Exceptional Children, 49(5), 432-439.

Rader, B. T. (1978). Competencies for mainstream teachers: An analysis. In J. K. Grosenick & M. C. Reynolds (Eds.), Teacher education: Renegotiating roles for mainstreaming (pp. 293-304). Reston, VA: Council for Exceptional Children.

Redden, M. R. (1976). An investigation of mainstreaming competencies of regular elementary teachers. Unpublished Doctoral Dissertation, University of Kentucky, Lexington.

Redden, M. R., & Blackhurst, A. E. (1978). Mainstreaming competency specifications for elementary teachers. Exceptional Children, 44, 615-617.

Schultz, J. B., & Turnbull, A. P. (1983). Mainstreaming handicapped students: A guide for classroom teachers (2nd Ed). Boston: Allyn and Bacon, Inc.

Striefel S., Killoran, J., Quintero, M., & Adams, P. R. (1985). Definition of mainstreaming. Unpublished manuscript, Utah State University, Developmental Center for Handicapped Persons.

Wilcox, B. (1977). A competency-based approach to preparing teachers of the severely and profoundly handicapped: Perspective I. In E. Sontag (Ed.), Educational programming

for the severely and profoundly handicapped (pp. 418-429). Reston, VA: Division on Mental Retardation, The Council for Exceptional Children.

Appendix A

Reference List of Sources Reviewed

A common body of practice for teachers: The challenge of Public Law 94-142 to teacher education. (1980). Washington, DC: The American Association of Colleges of Teacher Education, Washington DC.

Anderson, A. S. (1979). Public Law 94-142 and suggested areas of competencies for regular educators. College Park, MD: University of Maryland.

Baker, C. D. (1978). Material for use in teacher training programs: A statewide approach. In J. K. Grosenick & M. C. Reynolds, Teacher education: Renegotiating roles for mainstreaming (pp. 327-339). Reston, VA: Council for Exceptional Children.

Burke, P. J., and Cohen, M. (1977). "The quest for competence in serving the severely/profoundly handicapped: A critical analysis of personnel preparation programs. In E. Sontag (Ed.), Educational Programming for the Severely and Profoundly Handicapped (pp. 445-465). Reston, VA: Division on Mental Retardation, The Council for Exceptional Children.

Byford, E. M. (1979). Mainstreaming: The effect on regular teacher training programs. Journal of Teacher Education, 30(6), 23-24.

Certo, N, & York, R. (1976). Minimal competencies for teachers of severely and profoundly handicapped students. Madison, WI: University of Wisconsin, Department of Studies in Behavioral Disabilities.

Corrigan, D. C. (1978). Public Law 94-142: A matter of human rights; A call for change in schools and colleges of education. In Grosenick, J. K., and Reynolds, M.C., Teacher education: Renegotiating roles for mainstreaming (pp. 17-29). Reston, VA: Council for Exceptional Children.

Crisci, P. E. (1981). Competencies for mainstreaming: Problems and issues, Education and Training of the Mentally Retarded, 16, 175-182.

Department of Special Education (1983). Teacher competencies for certification: Severe handicaps. Unpublished manuscript, Utah State University, Logan.

Fredericks, H. D. B., Anderson, R. B., Baldwin, V. L., Grove, D., Moore, W. G., Moore, M., & Beaird, J. H. (1977). The identification of competencies of teachers of the severely handicapped (Grant No. OEG-0-74-2775). Bureau of Education for the Handicapped, Department of Education.

Gear, G. (No date). Essential teacher competencies. Tuscaloosa: University of Alabama.

Goldhammer, K., Rader, B. T., & Reuschlein, P. (1977). Mainstreaming: Teacher competencies. East Lansing, MI: Michigan State University, College of Education.

Goldman, S., & Masla, J. (1976). Mainstreaming preparation for regular education personnel. Athens: Ohio University.

Goodspeed, M. T., & Celotta, B. K. (1982). Professors' and teachers' views of competencies necessary for mainstreaming. Psychology in the Schools, 19, 402-407.

Guralnick, M. J. (1981). Programmatic factors affecting child-child social interaction in mainstreamed preschool programs, Exceptional Education Quarterly, 1(4), 71-91.

Haisley, F. B., & Gilberts, R. D. (1978). Individual competencies needed to implement P.L.94-142. Journal of Teacher Education, 29(6), 30-33.

Haring, N.G., (1978). Conclusion: Classroom two. In N. G. Haring (Ed), Behavior of Exceptional Children (2nd ed.). Columbus, Ohio: Charles E. Merrill.

Horner, R. D. (1977). A competency-based approach to preparing teachers of the severely and profoundly handicapped: Perspective II. In E. Sontag (Ed.), Educational programming for the severely and profoundly handicapped (pp. 430-444). Reston, VA: Division on Mental Retardation, The Council for Exceptional Children.

Karnes, M. B., Lee, R. C. (1978). Early childhood. Reston, VA: The Council for Exceptional Children.

Lilly, M. S. (1974). Classroom teacher competencies for mainstreaming. Duluth, MN: University of Minnesota.

Mann, P. H. (1977). Mann Self-Assessment Competency Inventory (Grant No. G00781840). Bloomington: Indiana University, National Inservice Network.

Monaco, T. M., & Chiappeta, E. L. (1983). Identifying competencies for mainstream teachers through the perspectives of state directors of special education. Education, 99, 59-63.

Payne, R., & Murray, C. (1974). Principals attitudes toward integration of the handicapped. Exceptional Children, 41, 123-125.

Peterson, N. L. (1983). Personnel training for mainstreaming young handicapped children. In J. Anderson, & T. Black (Eds.), Mainstreaming in early education. Chapel Hill, NC: Technical Assistance Development System.

Rader, B. T. (1978). Competencies for mainstream teachers: An analysis. In J. K. Grosenick & M. C. Reynolds (Eds.), Teacher education: Renegotiating roles for mainstreaming (pp. 293-304). Reston, VA: Council for Exceptional Children.

Redden, M. R., & Blackhurst, A. E. (1978). Mainstreaming competency specifications for elementary teachers. Exceptional Children, 44, 615-617.

Robie, D. E., Pierce, M. M., & Burdett, C. (1979). Vermont's responsive teacher program: Competency based teacher training, Exceptional Children, 45, 365-367.

Rude, C. R. (1978). Trends and priorities in inservice education. Exceptional Children, 45, 172-176.

Stainback, W., & Stainback, S. (1984). A rationale for the merger of special and regular education. Exceptional Children, 51, 102-111.

Stamm, J. M. (1980). Teacher competencies: Recommendations for personnel preparation. Teacher Education and Special Education, 3(1), 52-57.

Westling, D. L., Koorland, M. A., & Rose, T. L. (1981). Characteristics of superior and average special education teachers. Exceptional Children, 47, 357-363.

Wilcox, B. (1977). A competency-based approach to preparing teachers of the severely and profoundly handicapped: Perspective I. In E. Sontag (Ed.), Educational programming for the severely and profoundly handicapped (pp. 418-429). Reston, VA: Division on Mental Retardation, The Council for Exceptional Children.

Table 1

Instrument	Purpose	Description	Population	Strengths & Weaknesses
SbS (Walker)	To assess teachers behavioral demand levels in the mainstream setting. To use as a measure for matching teacher behavioral expectations and student performance. To measure degree of teacher's technical assistance needs.	107 items. 3 selections with rating scale. -description of appropriate behavior -S[1] maladaptive behaviors. -measure technical assistance needs.	Teachers	-Good rating scale -Just social behavior measure.
Personal attributes inventory--Kaufmann (Affective component) (Parish, Eads, Reece, Piscitello, 1977)	To measure affect by noting number of adj. selected as characterisitic of target population.	Select from list of adj. those which best describe target population.	Teacher	
Semantic Differential Paradigm - Hughes, Wallace, & Kaufmann (Affective component)	To measure affect by noting rating of labels.	6 labels commonly applied to handicapped children in school's		
Social Distance Scale (Behavioral component) Harasymiw, Horre, Lewis, (1979)	To examine what type of social relationship he/she would be willing to enter into with a particular handicapped individual.		Elementary & secondary teachers	
Behavioral Preference Rankings (Behavioral component)	To examine which handicaps a teacher prefers to teach.		Elementary & secondary	Use of labels increases chance for multiple interpretations.
Attitudes toward handicapped individuals Lazar	To measure acceptance, understanding, & perception of differences of handicapped persons.		Teachers (students teachers & graduate student sample)	

Table 2

Instrument	Purpose	Description	Population	Strengths & Weaknesses
Knowledge Measure	To assess student comptentencies in various aspects of assessment and instruction of exceptional students.	40 multiple choice	College students	Includes normal & gifted
Measure of willingness to accept exceptional students in regular class (Green & Rock)	To measure regular teachers' willingness to accept exceptional students.	6 items	Regular classroom teachers	Few items
Regular Education Teachers' Options & Perceptions of Mainstreaming Questionnaire (Ringlaben & Price)	To assess regular classroom teachers' perceptions of mainstreaming.	22 item questionnaire I-background information IL-Likert scale (3 or 5 pt.) indicate opinions & perception about knowledge & preparation for mainstreaming, perception of how mainstreaming works in their teaching of both students.	Teachers	Fails to pin point reasons why mainstreaming is perceived to be failing by some.
Disturbing Behavior Checklist (Algozzine) (Affective comp)	For teachers to indicate the distrubingness of certain behaviors characteristic of emotionally disturbed students.		Teachers	
Personal Attributes Inventory	To measure affect by noting number of adjective characteristic of target population.		Regular Teachers	
Hierarchy of Attitudes Towards Categories of Handicapped	To prove the usefulness of ordering theory for building a theory concerning the interrelated network of attitudes.	Booklet form. 15 minute test time. Scale (1) 2 st. with label was deleted & blank included (11 labels listed). with 6 pt. Likert agree or disagree. (2) operationalized definition 2 attitude st. on integration in community & school (LRE)	College student sample	-Operationalized labels -Includes gifted -Theory focused

Table 3

Instrument	Purpose	Description	Population	Strengths & Weaknesses
Correlates of Child Handicapping Conditions (Walker, Rankin)	To assess teacher tolerance levels in relation to conditions & characteristics associated with handicapping conditions	24 items with instructions to check items cause him to resist placement of child with those conditions. With technical assistance could change be made and placement made.	Sp. Ed. Teachers	Examines specific areas in need of technical assistance
Child Change Data & Teacher Change Data (Salend & Johns)	-To document child's progress teachers and teacher change toward mainstreaming. -To allow teachers to overcome feelings of doubt by working with exceptional students & seeing results.	Unobtrusively recorded teacher mainstream behaviors & academic & social changes in child over 22 weeks (5 baseline, 17 intervention) by counselor with behavior management.	Teachers	-Good for later on--technical assistance goal. -Too time consuming for initial assessment.
Brophy-Good-Child Dyadic Interaction System	To compare interaction patterns of regular elementary teachers with high achieving students, learning disabled students, behaviorally handicapped students.	-Observation data collection. 5^1 categories in which to record teachers contacts with individual students in settings involving work, procedure, & behavior interactions.	Regular elementary teachers	Does not address need for matching.

Table 4

Instrument	Purpose	Description	Population Addressed	Strengths & Weaknesses
Essential Teacher Competencies for Mainstreaming Handicapped Children Questionnaire (Interrelated Teacher Education Project) (Behavioral Component)	-To measure subjects perceived skill compentence in training areas. -To assess attitudes toward mainstreaming & determine appropriate intervention if necessary.		Student teachers	Examines areas in need of technical assistance
Attitudes Toward Disabled Persons (Cognitive Component) (Baker) (Yucker, Block, & Young, 1966)	To measure extent to which respondent believes D.P. are same as normal individuals or different & need treatment	8 subscales representing separate attitude toward particular aspcect of mainstreaming.	Student Teachers	
Attitudes Toward Mainstreaming Scale (Larrivee & Cook)	To assess classroom organization & management of exceptional children.	30 items Likert Scale 1-5	Student teachers & graduate students (sample)	-Other subscales necessary to assess other facets of mainstreaming. -Too small sample.
Mainstreaming Opinionaire (Schmelkin)	To examine effects of mainstreaming on development of handicapped children, normal children, & teachers.	30 item with Likert scale 2 subscales (15 items each) Academic costs of mainstreaming Socio-emotional costs of segregation.	Teachers	Most teachers surveyed had at least 1 handicapped student before -Use 3 labeled
Mainstreaming Oppionionaire (Reynolds, Reynolds-Martin)	To examine attitudes toward mainstreaming and determine correlation with teacher variables.	29 st. of attitudes in 4 clusters. 4 pt. Likert scale Clusters teachers perceptions of: Role of EMR student Teacher of EMR student Regular Teacher Attitudes toward mainstreaming Compared with teacher variables (age, level of preparation, length of experience, prior experience with mainstreamed children)	Elementary teacher 1/2 with experience, 1/2 without experience.	

MINIMUM LEVELS OF TRAINING

Key: X=Minimum necessary for all teachers
o=Necessary for teachers who must mainstream without ready access to specialists and consultants

TEACHER COMPETENCY AREAS (Regular Education)	NON-CRITIQUED DIDACTIC TRAINING		CRITIQUED (crtq) DIDACTIC TRAINING			SKILL BUILDING WITH FEEDBACK				DIRECTED INDIVIDUAL SHAPING (One or more of these)			LEVEL OF MAINSTREAMING AT WHICH MINIMUM LEVEL OF TRAINING IS NEEDED
	Class/ workshop	Reading	Reading		Workshop or class	Observe demo		Self-practice		Consultation	Crtq video tape	In-Class trainer	
			self-test	crtq test	crtq test/ exercise	role play	real	role play	real				
1. Prepare Class for Mainstreaming	X	X	X	X	X								1 - 5
2. Assess Needs and Set Goals	X	X	X	X	X	o	o	o	o	o			2 - 5
3. Evaluate Learning	X	X	X	X	X	o	o	o	o	o			3 - 5
4. Curriculum	X	X	X	X	X								3 - 5
5. Teacher-Parent Relationship	X	X	X	X	X	X	X	X	X				2 - 5
6. Teaching Fundamental Skills	X	X	X	X	X	X	X	X	X	X	o	o	2 - 5
7. Exceptional Conditions	X	X											1 - 5
8. Professional Consultation	X	X	X	X	X	X	X	X	X				2 - 5
9. The Nature of Mainstreaming	X	X											1 - 5

MINIMUM LEVELS OF TRAINING (cont'd.)

Key: X=Minimum necessary for all teachers
o=Necessary for teachers who must mainstream without ready access to specialists and consultants

TEACHER COMPETENCY AREAS (Regular Education)	NON-CRITIQUED DIDACTIC TRAINING: Class/ work-shop	NON-CRITIQUED DIDACTIC TRAINING: Read-ing	CRITIQUED (crtq) DIDACTIC TRAINING: Reading: self-test	CRITIQUED (crtq) DIDACTIC TRAINING: Reading: crtq test	CRITIQUED (crtq) DIDACTIC TRAINING: Workshop or class: crtq test/ exercise	SKILL BUILDING WITH FEEDBACK: Observe demo: role play	SKILL BUILDING WITH FEEDBACK: Observe demo: real	SKILL BUILDING WITH FEEDBACK: Self-practice: role play	SKILL BUILDING WITH FEEDBACK: Self-practice: real	DIRECTED INDIVIDUAL SHAPING (One or more of these): Consul-tation	DIRECTED INDIVIDUAL SHAPING (One or more of these): Crtq video tape	DIRECTED INDIVIDUAL SHAPING (One or more of these): In-Class trainer	LEVEL OF MAIN-STREAMING AT WHICH MINIMUM LEVEL OF TRAINING IS NEEDED
10. Student-Student Relationships	X	X	X	X	X	X	X	X	X	X			1 - 5
11. Attitudes	X	X	X	X	X								1 - 5
12. Resource and Support Systems	X	X	X	X	X	o	o	o	o	o			2 - 5
13. Learning Environment	X	X	X	X	X	X	X	X	X	X	X		2 - 5
14. Interpersonal Communication	X	X	X	X	X	X	X	X	X				2 - 5
15. Teaching Communication Skills	X	X	X	X	X	X	X	X	X	o	o	o	2 - 5
16. Administration	X	X	X	X	X								3 - 5
17. Individualized Teaching	X	X	X	X	X	o	o	o	o	o			2 - 5
18. Class Management	X	X	X	X	X	X	X	X	X	X	X		3 - 5
19. Teaching Techniques	X	X	X	X	X	X	X	X	X	X	X		3 - 5

MINIMUM LEVELS OF TRAINING (cont'd.)

Key: X=Minimum necessary for all teachers
o=Necessary for teachers who must mainstream without ready access to specialists and consultants

TEACHER COMPETENCY AREAS (Regular Education)	NON-CRITIQUED DIDACTIC TRAINING		CRITIQUED (crtq) DIDACTIC TRAINING			SKILL BUILDING WITH FEEDBACK				DIRECTED INDIVIDUAL SHAPING (One or more of these)			LEVEL OF MAIN-STREAMING AT WHICH MINIMUM LEVEL OF TRAINING IS NEEDED
	Class/ work-shop	Read-ing	Reading		Workshop or class	Observe demo		Self-practice		Consul-tation	Crtq video tape	In-Class trainer	
			self-test	crtq test	crtq test/ exercise	role play	real	role play	real				
20. Legal Issues	X	X											1 - 5
21. Behavior Modification	X	X	X	X	X	X	X	X	X	X	X	X	2 - 5
22. Task Analysis Skills	X	X	X	X	X	o	o	o	o	o			3 - 5
23. Teaching Social Skills	X	X	X	X	X	X	X	X	X	X	o	o	2 - 5

MINIMUM LEVELS OF TRAINING (cont'd.)

Key: X=Minimum necessary for all teachers
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TEACHER COMPETENCY AREAS (Regular Education)	NON-CRITIQUED DIDACTIC TRAINING		CRITIQUED (crtq) DIDACTIC TRAINING			SKILL BUILDING WITH FEEDBACK				DIRECTED INDIVIDUAL SHAPING (One or more of these)			LEVEL OF MAIN-STREAMING AT WHICH MINIMUM LEVEL OF TRAINING IS NEEDED
	Class/ work-shop	Read-ing	Reading		Workshop or class	Observe demo		Self-practice		Consul-tation	Crtq video tape	In-Class trainer	
			self-test	crtq test	crtq test/ exercise	role play	real	role play	real				
20. Legal Issues	X	X											1 - 5
21. Behavior Modification	X	X	X	X	X	X	X	X	X	X	X	X	2 - 5
22. Task Analysis Skills	X	X	X	X	X	o	o	o	o	o			3 - 5
23. Teaching Social Skills	X	X	X	X	X	X	X	X	X	X	o	o	2 - 5

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